415 in. high, 6 1/2 in. in diameter at top, 4 in. at
285 base. Used by individuals for drinking soup; also used for shaping biscuits of acorn mush (p. 18).

(f) Meal basket (ponol); was about 16 in. high, flat-bottomed, with sides which curved inward toward top; latter about 6 in. in diameter. Used as container for freshly ground chia seeds, etc. (Fig. 8b.)

(g) Mortar hopper (hoyanut, PN); was made from old cooking basket with bottom cut out; height, diameter varied, depending on size of mortar; some hoppers 6-8 in. deep, 16 in. in diameter across top. Attached permanently to mortar [317] with asphalt; PN had seen hopper attached to small portable stone mortar used for mixing tobacco and lime; FP had seen Bob Rabbit, widowed Kawaiisu rain doctor, using hopper on mortar hole in log at piñon camp, "where there was no stone." Hopper helped prevent small seeds from flying out of mortar during pounding.

415
● 323

Fig. 8. Basketry and pottery shapes. a, tule tray for drying sweets; upper part, body of tray, lower part, handle end which was folded over at broken line. b, coiled basket used for storing small seeds. c, pottery bowl in Andreas collection, height 4 in., width at mouth 4½ in., thickness ¼ in.; surface find in mts., Tübatulabal area. d, bottleneck money jars (1-20952, 20953).

415 (h) Money jar (ukulušt) or "Tulare bottle-
285 neck" (fig. 8d); most elaborate basket type; specimen 1-20951, 20953 (O. T. Mason, 479, pls. 193, 194), made by FP's mother, ornamented around

[A. 31(b)]

237 cular mat (či·gon) 3 in. wide, 1 1/2 in. thick, made of shredded native twine. Mat hung up on tree to dry; then stored away; when used, mat soaked in warm water and broken into several pieces; brains sank to bottom of container, shredded twine skimmed off surface of water with hands and thrown away. Brains then stirred into water and hide put in.

281 415 Sacks, purses, flat hides.- Sacks (ma·šat) made from untanned deer, antelope, coyote, wildcat skins. Skin removed whole from carcass by cutting it around neck, lower legs, and anus and peeling it off; skin then turned hair side out, except those used for quivers, and anal and leg openings sewn up with native string, using bone awl. Skin then set up on end, loose dirt poured in through neck hole and skin left to dry for 2-3 days. When dry, dirt poured out and sack ready to use for carrying acorns, piñons, arrows, or for storing food, shell money, etc.

[177] Purse (mu·gulat) of weaselskin used in post-white times to carry silver dollars. Specimen 1-19804, weaselskin purse, labeled "used for Indian money," consists of entire skin which is dehaired; tanned, turned inside out, left open at mouth; SM probably correct in denying such purses [436] used for shell money as latter was kept strung, coiled and any large amount would be too bulky for such small container.

[171] Bear hides tanned with hair left on; scraped, brains rubbed in as among Surprise Valley Paiute (Kelly, 119). Salt grass, cane laid on these tanned hides and flayed; occasionally, hides used as bed coverings.

RECEPTACLES

415 Besides using basketry and rawhide containers, Tübatulabal also made pottery and horn receptacles and apparently used imported steatite ware to slight extent.

● 323 [42] Pottery.- Despite fact that "all the women used to make pots" (ES, FP), no informant could manufacture one for me, nor are any pots (ka·ṣul) now extant except one small mended specimen (fig. 8c), provenience of which is doubtful. However, FP had seen her grandmother make pots and SM remembered process sufficiently well to describe it briefly, as follows.

[317] Red clay (yahawa·l), obtainable from several deposits on floor of South Fork valley, used for pots; ES pointed out one deposit of clay on knoll below village site no. 9 (fig. 11) in field belonging to Charles E. Andress, 1/4 mile E of road leading to village site; another deposit near village site no. 8. Clay dug, finely pounded in pit mortar and mixed with water into dough; no binding material added (FP, SM). Lump of clay flattened into disk with hand, set down on board or, formerly, basketry sifter; roll of clay about

T 323 [171] as thick as thumb laid around upturned edge of circular base and one roll after another used to build up side of pot as among Yokuts (Gayton, 1929, 242). Inside and outside of pot smoothed with fingers only (SM, FP); twig, chip, or acorn husk "might have been used a little" (FP), but small polishing stone such as Yokuts employed (ibid., 243) not used, nor were fingers dipped in syrupy substance while smoothing pot as among Owens Valley Paiute (Steward, 1933, 267). After pot shaped and smoothed it was sun-dried and then put on "a blazing fire made from any kind of wood"; pot allowed to get "red hot" (FP); firing caused clay to turn gray-black (SM, FP). T [171] After cooling, pot ready for use; coating acorn mush (Gayton, 1929, 245) not given it. SM had seen Tübatulabal pots shaped like middle and right-hand specimen in upper row of Yokuts pots pictured in Kroeber's Handbook, 530, pl. 51, but had never seen incised lines, such as those on Yokuts specimen, on any Tübatulabal pottery.

T 415 Pots were used for boiling meat, small game, whole piñons and buckeye nuts, tobacco stalks; T [276] FP said that occasionally acorn mush cooked in them although it was usually stone boiled. Pottery pipes not made (SM), cane cigarette pipes T [53a] being used for smoking; FC had seen old Koso woman make clay pipes for her own use. Little girls sometimes made crude unbaked (SM) clay [85] dolls (a·na·wišti·l) from red clay; SM thought such to have been aboriginal; children also occasionally made animal figures of clay, baked them (Voegelin, 1935 b, 227). Although pottery generally made by women, MM as boy had tried to make pots, but his cracked when heated, whereas "old-time pots were so hard they wouldn't break if you threw them down or hit them with a rock" T (MM).

171 Contiguous distribution of this type of pottery limited to a few Calif. and Great Basin tribes (Gayton, 1929, 248, fig. 3; Steward, 1933, 269).

T 321 Horn objects.- Mt. sheep horn used as container for pounded tobacco and lime (see section on Tobacco); spoons (ta·mil) "shaped like a kitchen spoon" were made from antelope horn, using base of horn for bowl; "men and women used spoons for eating acorn mush" (SM); FN denied use of spoons.

T 324 Steatite objects.- Stone olla, 3 ft. high, "carved out of rock," was mentioned by FM, who said his father had found it among boulders on C T hill behind Jesus ranch in South Fork valley 40 yrs. ago. FM could give no further details.

756 Small steatite bowls and tubular pipes with 177 bird-bone mouthpieces (pl. 1a) used as part of [32] rain doctor's outfit. Outfit pictured, now in possession of SM, inherited by him from his stepfather, Francisco Sasterray, Tejon Indian (probably Chumash); this makes these objects foreign importations among Tübatulabal; however SM said

276 small mortar, and powdery substance stuffed into
887 tubular pipe (wo·ša·giniš̌t) made from 4- to 10-in. length of hollow cane (paha·bul), Phragmites communis Trin. Old men smoked once or twice daily while in sweat house or after morning, evening meals, "not all the time, like people do now" (MM). Smoker held pipe horizontally; took long slow puff from it, inhaling deeply, then removed pipe from mouth and closed lips; exhaled smoke slowly through nostrils. "The smoke went up from the smoker's lungs right to the top of his head, because that smoke was so strong" (MM). From 2-3 such long puffs, no more, taken at one smoking; tobacco so strong it soon caused smoker to tremble violently as though intoxicated. After indulging thus, smoker extinguished pipe by rubbing it in palm of hand, then set it aside for future use. When tobacco in
● [323] pipe consumed, cane tossed away. Pottery pipe not used; steatite pipes used by rain makers.

171 Distributional discussion.- In general discussions of the use of tobacco in North America
276 the trait of chewing tobacco with lime is mentioned as having a continuous distribution from the North Pacific Coast tribes S through the greater part of Calif. (Linton, 2; Wissler, 26, fig. 6; Sayce, 200; West, 99-100). Dixon, how-

Tribe	Tobacco species	Native names
C.,S. Miwok	N. bigelovii	ka´sü; kaku; hū´tĭa
W. Mono		pamu; cokx
O. V. Paiute	N. attenuata	pāmüpi; pâ^{h}mū; sāgō
Koso		sohon, shogun
Tübatulabal	N. bigelovii; N. attenuata	šo'ogonht
Kawaiisu	N. attenuata; N. trigonophylla	soóda; koópi
Yokuts		sɔhɔw, personal name of plant; sɔ́.Gɔn,tobacco, tobacco plant; ba'um, tobacco smoke, cigarette
Costanoan		
Salinan		
Chumash	N. species	
Kitanemuk	N. species	tsiwut
Alliklik	N. species	
Gabrielino	N. species	shuki
Cahuilla	N. attenuata	pivat

[p. 38(a)]

4: Kroeber E-5 (no date)1925 NS22 Tübatulabal NS22
Yokuts NS29

of these terms to wider groups. Thus the "Yokol" of the Tübatulabal seem to have included also the Gawia, Yaudanchi, and perhaps other tribes.

The Tübatulabal of to-day may aggregate 150. Perhaps the number is nearer 100. On the ancient population there are no data. A thousand seems as reasonable a guess as any other: at least it appears ample.

ARTS.

The Tübatulabal are one of the seemingly endless number of California tribes whose customs have never been described in any detail. Intercourse and intermarriage between them and the Yokuts were so frequent that they must have been strongly influenced by this much larger nation.

Their basketry is scarcely distinguishable from that of the southern Yokuts; it appears to average a little better in fineness. Tree yucca root replaced *Cercis* bark for red patterns. They made pottery of the same type as the Yokuts. Like these people, they ate tobacco mixed with lime. Their houses, or at least one form of dwellings, were covered with tule mats.

It is not certain that they had any form of sweat house: what may be remains of such have been reported. Balsas of bundled tules, with a keel, a slender prow, and a square stern, were made.

The dead were buried.

SOCIETY.

In their social life they stood more apart. The exogamous moieties of the Yokuts were not represented among them. There are possible traces of the totemic manifestations that accompany this dual organization. Young eagles were caught and reared. They were not killed, but were ultimately liberated. The plucking of their feathers seems to have been only a minor end of their captivity. Other birds, such as condors, crows, hawks, and geese, and even young coyotes, were kept as pets; in some cases inherited by the son from the father. In mythology the eagle is the chief, the coyote his antithesis; one has as associates a variety of birds, the other lizards, vermin, and trivial or noxious beasts.

In some matters Yokuts practices have failed to obtain a foothold, or a secure one, among the Kern River people. The parent-in-law taboos are not observed, or only by those individuals intimately associated with the Yokuts by intermarriage. This factor, incidentally, has introduced a number of Yokuts personal names among the Tübatulabal, who care very little whether an individual's appellation has any meaning as long as it is the name of an ancestor. The designation of kindred is almost identical with that of the Kawaiisu, and

[P. 516] Tubatulabal NS22

T Y 343 no door, the doorway being merely an opening between the rafters [there probably was a doorway frame of some sort]. The fire was in front T Y of the center post. Firewood was kept in two [354] piles, one on each side of the entrance; men sitting next to these put wood on the fire.

T Y 515 Men did not indulge in sweats until they were twenty-five to thirty years old. Evening [late afternoon?] was the most popular time for a sweat, after which they would swim and return home to sleep. While in the sweat house men usually "just lay around." Sometimes, merely T Y 517 to entertain others or to practice, a man would dance the ha´t:m (the "piston-rod step" of Powers) if someone would sing for him. For such a performance there was no costume; it had no ritual significance. No games were played in the sweat house, nor was smoking indulged in -- "it was too strong in there."

MISCELLANEOUS DATA

T Y 524 Games.---Women played huču´w:s, the walnut-shell dice game, in the daytime only.

T Y 323 Pottery.---Pottery was made at Sototlo by women. The pounding of the clay paste, the coiling process were the only details remembered.

T Y 436 Money.---The small disc money of clamshells was measured by doubling a strand and then slipping it into a series of chain-stitch loops. A "rope" long enough to reach from the wrist to the shoulder, was worth $2.00 in "American money." Such a strand was exchanged for an eagle's leg with the down still intact.

T Y 286 Blankets.---F.M. did not know how "woven" skin blankets were made, save that strips of rabbitskin or wildcatskin were used in them.

T Y 805 Calendar.---A calendrical system of months based on moons was used in the old days. The only name he remembers was that for the month roughly coincident with February: kala´sa, meaning "blows it all away" or "cleaned up," because it was a period of high winds, trees were bare, and the leaves all blown away.

T Y 301 Hair nets.---These were used "everywhere" for the basis of feather head ornaments. A single hairpin (tsama´ni) held the ornament in place. Neither the net nor hairpin was used for ordinary dress, nor by women.

T Y [237] Yellowhammer strips.---Ornamental bands of sewn yellowhammer feathers (paiya´mən) were known but rarely used.[130] A doctor who owned one would wear it for the dancing on the night of celebration following a mourning ceremony. It was never used when the doctor was dressed for curing; it was "just to look pretty." The band was worn around the head with the ends hanging down the back.

T Y 534 Musical instruments.---The flute (uṭoi´´i) was made of elderwood; number of holes not

[130] Cf. Kroeber specimen (ibid., pl. 58).